

***Woodwardia fimbriata* Sm. in Rees**

giant chain fern
Polypodiaceae (Fern Family)

Status: State Sensitive

Rank: G5S2

General Description: *Woodwardia fimbriata* is a large evergreen fern. The stalk, or petiole, emerges from a thick subterranean to ground level stem. The petioles are basal and have orange to red scales towards the base. The scales get more straw colored towards the top of the petioles. Leaves can grow from 1 to 5½ ft (40 to 170 cm) high, making it the tallest of the *Woodwardia* species. There can be 8 to 24 pairs of evergreen leaflets on the leaves. The blades of the leaves can reach ½ to 3 1/3 ft (25 to 100 cm) in length, and are somewhat hairy and glandular, becoming hairless at maturity. The veins come together and separate to form tile-like structures, called areoles.

Identification Tips: This fern is one of the largest in Washington and the only species of *Woodwardia* in the state. The sori of the giant chain fern are short and broad and chain-like, setting it apart from other ferns in Washington. The sori are also deeply sunken and somewhat curved. The leaflets are quite leathery and triangular. It is the only species of *Woodwardia* in North America that is an evergreen. *Woodwardia* species have veins that come together forming a series of areoles.

Phenology: This species is identifiable year round.

Range: *Woodwardia fimbriata* occurs from Washington, in the Puget Trough area, south to southern California, and occurs as far east as Nevada. It ranges in elevations of 3 ft to 286 ft (1 to 87 m) throughout Jefferson, Pierce, Kitsap, Thurston, and Mason counties. There has been one documented occurrence at about 3000 feet (915 m) in Washington's Olympic National Forest.

Habitat: The species is found along moist stream banks and moist bluffs near salt water. It is uncommon inland of salt water in Washington.

Ecology: *W. fimbriata* grows among mixed conifer and mixed conifer-hardwood forests. It occurs along moist bluffs that are somewhat prone to slope failure.

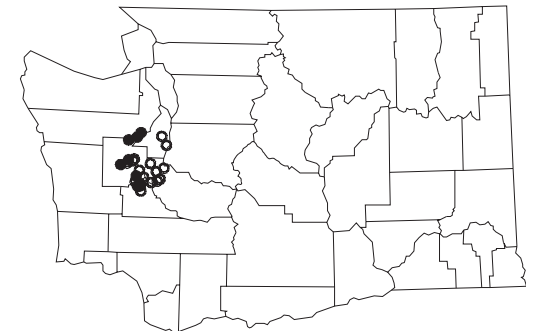
Woodwardia fimbriata

giant chain fern

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Known distribution of
Woodwardia fimbriata
in Washington



- Current (1980+)
- Historic (older than 1980)

Woodwardia fimbriata

giant chain fern



Photo by Kathy Ahlenslager



Photo by Mark Sheehan

Woodwardia fimbriata

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State Status Comments: The species is very limited in its distribution in Washington and there are few known occurrences. Additionally, most occurrences have a small number of individuals.

Inventory Needs: Current population information should be updated throughout Jefferson, Pierce, Kitsap, Thurston, and Mason counties. Additional inventory is also needed.

Threats and Management Concerns: The giant chain-fern population in Washington is threatened by competition with invasive species and erosion. There may also be some collection pressure.

References:

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